

What is claimed is:

1. An anti-aliasing filter comprising:

a substrate;

5 a first double-refraction plate ("DRP") of the anti-aliasing filter having at least

a first liquid photo-polymerization ("LPP") layer connected to the substrate, and

a first liquid-crystal polymer ("LCP") layer
10 disposed on the first LPP layer, the first DRP having a thickness selected so as to provide a selected separation of ordinary and extraordinary light rays.

2. The anti-aliasing filter of claim 1 wherein the first
15 LPP layer is disposed on the substrate.

3. The anti-aliasing filter of claim 1 further comprising an intervening layer disposed between the substrate and the first LPP layer.
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4. The anti-aliasing filter of claim 1 further comprising a second LCP layer disposed on the first LCP layer.

5. The anti-aliasing filter of claim 4 wherein the first
25 LPP layer has a selected orientation and the second LCP layer has the selected orientation.

6. The anti-aliasing filter of claim 1 wherein the thickness is between about 10 microns and about 150 microns.
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7. The anti-aliasing filter of claim 1 further comprising:
a first anti-reflective filter disposed on a first surface of the anti-aliasing filter; and
a second anti-reflective filter disposed on a second
35 surface of the anti-aliasing filter.

8. The anti-aliasing filter of claim 7 wherein the second anti-reflective filter is disposed on the first DRP.

5 9. The anti-aliasing filter of claim 7 wherein the second anti-reflective filter is disposed on a second substrate, the second substrate being affixed to the first DRP.

10 10. The anti-aliasing filter of claim 9 wherein the second substrate is affixed to the first DRP with optical adhesive so as to provide index matching between the first DRP and the second substrate.

11. The anti-aliasing filter of claim 1 further comprising:
15 a retarder plate disposed on the first DRP; and
a second DRP disposed on the retarder plate.

12. The anti-aliasing filter of claim 11 wherein the retarder plate and the second DRP are selected so as to
20 provide a two-dimensional anti-aliasing filter for at least one color of light.

13. The anti-aliasing filter of claim 11 wherein the first DRP, the retarder plate and the second DRP are selected so
25 as to provide a one-dimensional anti-aliasing filter for a first color of light and a two-dimensional anti-aliasing filter for a second color of light.

14. The anti-aliasing filter of claim 11 wherein the
30 retarder plate includes a plurality of quarter-wave retarder plates.

15. The anti-aliasing filter of claim 11 wherein the first
DRP, the retarder plate, and the second DRP are all made
from an LPP material and an LCP material.

5 16. The anti-aliasing filter of claim 11 wherein the first
DRP is made from a first LPP material and a first LCP
material, and the retarder plate is made of a second LPP
material and one of the first LCP material and a second LCP
material.

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17. The anti-aliasing filter of claim 11 wherein the
substrate is infrared-blocking color glass.

18. The anti-aliasing filter of claim 17 further comprising
15 an infrared-blocking filter.

19. The anti-aliasing filter of claim 11 further comprising
an infrared-blocking filter.

20 20. The anti-aliasing filter of claim 1 further comprising:
a package; and
a photodetector array disposed within the package, the
anti-aliasing filter being disposed on the package.